

**JAN 21 2005**

**U.S. Department of Energy  
Savannah River Operations Office  
and  
Westinghouse Savannah River Company**

**Authorization Agreement (AA)  
for the  
Concentration, Storage, and Transfer Facilities (CSTF)**

## Revision Log

<u>Revision</u>	<u>Purpose</u>
0	The initial issuance of this CST AA reflects the consolidation of the former Liquid Radioactive Waste Handling Facilities (LRWHF) AA (WSRC-RP-99-0256) and the In-Tank Processing Facilities (ITPF) AA (WSRC-RP-99-00664). The consolidation of these two AAs reflect the organizational consolidation of the former LRWHF and ITPF facilities into the F-Tank Farm, H-Tank Farm East, and H-Tank Farm West facilities.
1	This revision supports authorization of the chemical cleaning of the 242-16H Evaporator.
2	This revision deletes operation under the Safety Evaluation for Tank 49 Waste Material Disposition, WSRC-TR-2000-00483 and incorporates Reference 8 in Attachment 3.
3	This revision supports authorization of the restart of the 242-16H Evaporator.
4	This revision deletes the Safety Evaluation for Tank 49 Waste Material Transfer to Tank 50, WSRC-TR-2001-00122, and supports the return to service of Tank 49 as a supernate/salt storage tank.
5	This revision adds the prohibition of waste transfers into Type I and II tanks.
6	This revision supports the implementation of the CSTF DSA and TSR (WSRC-SA-2002-00007 and S-TSR-G-00001) and also incorporates the format and guidance of Manual 11Q, Procedures 1.08 and 1.01. The revision also includes the addition of DOE/EIS-0303 and DOE/EIS-0082-S2 EISs and associated RODs. This revision is considered a major rewrite; therefore, no revision bars are indicated.
7	This revision allows Tank 50 to receive waste transfers from CSTF waste storage tanks (removes restriction in Section 2).
8	This revision adds two technical justification and classification reports to the list of CSTF Radioactive Waste Management Documents in Attachment 2 to allow the transfer of waste from unirradiated material in H Canyon to Saltstone via Tank 50.

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**Section 1 – Facility Name, Function, and Location**

This Authorization Agreement (AA) applies to the Concentration, Storage, and Transfer Facilities (CSTF), a group of facilities and support services designed to receive, store, process and safely manage radioactive wastes from production and research facilities at SRS. The facilities include the F-Tank Farm (FTF), the H-Tank Farm (HTF), and the Waste Management Maintenance Facility (Building 299-H).

The FTF facility includes waste storage tanks, pump tanks, evaporators, and numerous associated transfer structures/components (e.g., diversion boxes) located in FTF, as well as the F/H Inter-Area Transfer Line. The HTF facility consists of waste storage tanks, pump tanks, evaporators, and numerous associated transfer structures/components (e.g., diversion boxes) located in HTF. The Waste Management Maintenance Facility includes Building 299-H.

The CSTF are located within F-Area and H-Area of the Savannah River Site (SRS) near Aiken, South Carolina. The facilities, major functions, subsystems, and support facilities are described in the CSTF Safety Basis (SB) documents, hereinafter referred to collectively as the CSTF SB. The SB for the CSTF is defined in Manual WSRC-IM-94-10 and listed in Attachment 1. This AA does not apply to the Effluent Treatment Facility.

**Section 2 – Authorized Scope of Operations**

The scope of operational activities being authorized by this AA is as described in: (a) the Work Authorization and Change Control process specified in Contract Number DE-AC09-96SR18500, (b) the CSTF SB, as defined in Manual WSRC-IM-94-10 and listed in Attachment 1, and (c) the Environmental Impact Statements (DOE/EIS-0082-S, DOE/EIS-0082-S2, DOE/EIS-0217, and DOE/EIS-0303) and the associated Records of Decision except with the following restrictions:

- A. Waste transfers into Type I and II Tanks are prohibited unless the transfers are used to retrieve the waste contained in Type I, II, or IV Tanks.
- B. Storage of In-Tank Precipitation process precipitate and supernate in Tank 241-949H is only permitted in the event of a leak in the primary of Tank 241-948H and following DOE approval of a Response Plan.

- C. Tank closure activities may be performed in accordance with the High Level Waste Tank Closure Program Plan, the Industrial Wastewater Closure Plan for F- and H-Area High Level Waste Tank Systems, and the Tank Specific Closure Modules.

### **Section 3 – Bases**

The Department of Energy (DOE) has determined:

- A. Through a series of comprehensive reviews under the Technical Assessment Program, the facility will be operated in compliance with the Standards/Requirements Identification Document (S/RID) WSRC-RP-94-1268, as amended, and this AA as specified in Contract Number DE-AC09-96SR18500, between DOE and Westinghouse Savannah River Company (WSRC). The S/RID has a separate review and approval process and may be amended without need to revise and re-approve this AA.
- B. The facility hazards have been adequately analyzed and appropriate operational controls have been employed as properly documented by the CSTF SB listed in Attachment 1 to this AA. The basis for this determination is documented in the DOE Safety Evaluation Report (SER), as supplemented. Each safety document individually has a separate review and approval process, thus each may be amended without need to revise and re-approve this AA. This AA serves to document the complete set of DOE-SRS-approved safety documents tailored for use by the facility and specifically approved by the DOE as the basis for safe operations. The latest revisions to the WSRC and DOE approved SB documents for the CSTF will be identified in Manual WSRC-IM-94-10, as amended.
- Safety Evaluation Report, Revision 0, for the Savannah River Site Concentration, Storage, and Transfer Facilities Documented Safety Analysis, WSRC-SA-2002-00007, Rev. 0, and Technical Safety Requirements, S-TSR-G-00001, Rev. 0, as supplemented (Letter, Allison to Pedde, 12/20/2002, PC-03-008).
- C. In accordance with the NEPA regulations, the environmental impacts of facility construction and operation have been evaluated. The environmental impacts of facility construction and operation have been documented in the Environmental Impact Statements. DOE has issued Records of Decision, and the scope of the activity contained in this agreement is consistent with the selected alternative. NEPA documentation has a separate review and approval process and may be amended without necessarily requiring revision and re-approval of this AA.
- DOE/EIS-0082-S, Final Supplemental Environmental Impact Statement (Record of Decision 60 FR 18589).
  - DOE/EIS-0082-S2, Savannah River Site Salt Processing Alternatives Final Supplemental Environmental Impact Statement (Record of Decision 66 FR 52752).

- DOE/EIS-0217, Savannah River Site Waste Management Final Environmental Impact Statement (Records of Decision 60 FR 55249, 62 FR 27241, and 66 FR 34431).
  - DOE/EIS-0303, Savannah River Site High-Level Waste Tank Closure Final Environmental Impact Statement (Record of Decision 67 FR 53784).
- D. Through performance of Operational Readiness Reviews, there is reasonable assurance that the facility can be operated without endangering the health and safety of the public, the workers or the environment.
- Operational Readiness Review for the ITP Facility (Operational Readiness Review (ORR) for In-Tank Precipitation Facility Savannah River Site, May 1995; and DOE Letter MB-95-0230, Fiori to Schwallie, In-Tank Precipitation (ITP) Start-up Authorization, September 1, 1995).
  - Replacement High Level Waste Evaporator (Letter, Rudy to Buggy, Operational Readiness Review for the Start of the Replacement High-Level Liquid Waste Evaporator at the Savannah River Site, December 1999).
  - Operational Readiness Review for the Restart of the 242-16H Evaporator (Letter, Anderson to Piccolo, U.S. Department of Energy Savannah River Office Operational Readiness Review Report for 2H Evaporator, DOE Letter OD-02-001, October 3, 2001).
- E. Through DOE's adherence to Federal Acquisition Regulations, Department of Energy Acquisition Regulations regarding selection of competent contractors, as well as WSRC's contractual commitment to an Integrated Safety Management System and S/RID requirements for personnel selection, training and qualification, DOE is assured that WSRC is technically qualified to engage in the activities authorized by this AA.
- F. Through DOE's review of an approved and current Radioactive Waste Management Basis, as listed in Attachment 2, the facility's handling, documentation and control of radioactive waste ensures compliance with all state, local and federal radioactive waste regulatory requirements.
- G. Through DOE's review of an approved and current Emergency Preparedness Hazard Assessment, the CSTF response and notification of accident condition ensures adequate protection for public and workers in surrounding facilities.
- H. Through DOE's review of the Safeguards and Security Basis per the General Site Security Plan, WSRC-RP-2000-00968, latest revision, as amended, the facility meets its applicable safeguards and security requirements.

#### **Section 4 – Requirements and Conditions**

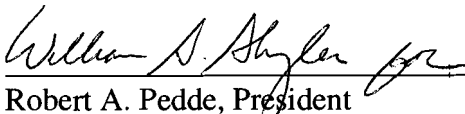
Operation of CSTF is subject to the following requirements and conditions:

- A. WSRC shall operate the facilities in compliance with the S/RID (latest revision). In accordance with Contract Number DE-AC09-96SR18500, the S/RID identifies the rules, regulations, orders, standards, and directives of DOE and other federal, state, or local agencies that are applicable to the activities associated with CSTF. Authorized deviations shall be documented by WSRC and approved by DOE through Exemption Requests, Compliance Schedule Agreements, Implementation Plans, or modification of the S/RID, as appropriate. New or revised requirements shall be incorporated into the S/RID as directed by DOE. WSRC shall ensure compliance commitments are tracked and completed within established time frames.
- B. WSRC shall operate the CSTF in accordance with the operational controls specified in the latest revision of the SB documents as defined by Attachment 1 to this AA and Manual WSRC-IM-94-10, as amended.
- C. WSRC shall implement and maintain an Environmental Protection program, including radioactive effluent monitoring, complying with applicable environmental protection and environmental permit requirements as specified in S/RID Functional Area 20, Environmental Protection. Permits with general applicability are listed below. Compliance is required with all applicable environmental permits even if not listed herein.
  - South Carolina Department of Health and Environmental Control Industrial Wastewater Division Partial Permit to Operate, Project F and H Area High Level Radioactive Waste Tank Farms Construction Permit No. 17,424-IW, as amended.
  - South Carolina Department of Health and Environmental Control Industrial Wastewater Division Permit to Operate, Project: Tank 50 As-Built Construction Permit No. 14,520, as amended.
  - South Carolina Department of Health and Environmental Control Industrial Wastewater Division Permit to Operate, Project: Z-Area Interarea Transfer Line Construction Permit No. 14,338, as amended.
  - South Carolina Department of Health and Environmental Control National Pollutant Discharge Elimination System Permit No. SC0000175 for serial outfalls H-07, H-08, H-12, and F-08, as amended.
  - South Carolina Department of Health and Environmental Control Air Quality Permit No. 0080-0041 (H-Area and F-Area Tank Farms), as amended.
  - United States Environmental Protection Agency Letter from Winston A. Smith to R. L. Morgan, dated April 25, 1988 (Radioactive NESHAP Permit), as amended.


- D. During an emergency, facility personnel may take emergency actions that depart from a requirement in the approved AA when no actions consistent with the AA are immediately apparent, and when these actions are needed to protect workers, the public or the environment from imminent and significant harm. Such action must be approved as a minimum by a qualified First-Line Manager or Shift Manager. Reporting of such departure from the AA shall be coincident with the normal reporting (per Procedure Manual 9B) for the emergency that caused the departure to be necessary.

### **Section 5 – Contractual Citation Effective Dates and Approval Signatures**

This AA is subject to the conditions specified in Contract Number DE-AC09-96SR18500 between WSRC and DOE. DOE and WSRC agree to the conditions and limitations contained herein. The conditions and limitations within this AA are effective upon the date both parties have signed this AA, or, if applicable, upon revision of Manual WSRC-IM-94-10 and implementation of this revision, which shall be completed within 7 days from the date both parties have signed this AA. This AA shall expire upon expiration or termination of Contract Number DE-AC09-96SR18500.

  
Robert A. Pedde, President  
Westinghouse Savannah River Company

1/19/05  
Date

  
Jeffrey M. Allison, Manager  
Savannah River Operations Office

1/21/05  
Date

**Attachment 1**

CSTF Safety Basis Documents

[The latest effective revision is defined in Manual WSRC-IM-94-10]

1. Concentration, Storage, and Transfer Facilities Documented Safety Analysis, WSRC-SA-2002-00007, latest revision, as amended.
2. Concentration, Storage, and Transfer Facilities Technical Safety Requirements, S-TSR-G-00001, latest revision, as amended.
3. Concentration, Storage, and Transfer Facilities Justification for Continued Operations, WSRC-TR-2003-00083, latest revision, as amended.



**Attachment 2**  
CSTF Radioactive Waste Management Basis Documents

1. CSTF Safety Basis Documents, listed on Attachment 1.
2. F/H Tank Farms Waste Compliance Plan for Transfers to the Effluent Treatment Facility, WSRC-TR-99-00009, latest revision, as amended.
3. High Level Waste Management Division Concentration, Storage, & Transfer Department Transuranic Waste Certification Plan, HLW-SUP-99-0032, latest revision, as amended.
4. Citation Determination and Evaluation of Waste Incidental to Reprocessing, HLW-SUP-99-0060, latest revision, as amended.
5. HLWD LLW Container Staging, Inspection, and Monitoring Requirements, HLW-SUP-2000-0007, latest revision, as amended.
6. Federal Facility Agreement for the Savannah River Site, Administrative Document Number 89-05-FF, WSRC-OS-94-42, latest revision, as amended.
7. Plan for Generation, Storage, and Treatment of Mixed Waste, Savannah River Site Approved Site Treatment Plan, WSRC-TR-94-0608, latest revision, as amended.
8. Characterization of H-Canyon Wastes When Processing Unirradiated Materials, WSRC-TR-2004-00328, latest revision as amended.
9. Cleaning Strategy to Support Low Level Waste Transfer to Tank 50 for Saltstone Processing, CBU-SPT-2004-00093, latest revision as amended.